

What is claimed is:

1. A lithium secondary battery comprising:  
a positive electrode active material which is composed  
mainly of Li and Mn and has a cubic spinel structure, the  
primary particles of the positive electrode active material  
having a substantially octahedral shape constituted mainly by  
flat crystal faces.
2. A lithium secondary battery according to Claim 1, wherein the  
primary particles contain those primary particles in which at least one  
side of each flat crystal face has a length of  $0.2 \mu\text{m}$  or more.
3. A lithium secondary battery according to Claim 2, wherein the  
at least one side of each flat crystal face has a length of  $1 \mu\text{m}$  or more.
4. A lithium secondary battery according to Claim 1, wherein the  
primary particles have an average particle diameter of 0.1 to  $20 \mu\text{m}$ .
5. A lithium secondary battery according to Claim 4, wherein the  
average particle diameter is 1 to  $20 \mu\text{m}$ .
6. A lithium secondary battery according to Claim 1, wherein the  
positive electrode active material has a Li/Mn ratio of larger than 0.5.
7. A lithium secondary battery according to Claim 1, wherein the  
primary particles form secondary particles having the maximum  
particle diameter of  $50 \mu\text{m}$  or less.
8. A lithium secondary battery according to Claim 1, which has a  
capacity of 2 Ah or more.
9. A lithium secondary battery according to Claim 1, which is used  
in an electric vehicle or a hybrid electric vehicle.

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